

List of All Chemicals

P Hierochloe odorata (Poaceae)

Common name(s)

Vanilla-Scented Grass; Manna Grass; Sweet Grass; Vanilla Grass; Holy Grass; Seneca Grass

How used

Medicinal

*Unless otherwise noted all references are to Duke, James A. 1992. Handbook of phytochemical constituents of GRAS herbs and other economic plants. Boca Raton, FL. CRC Press.

| Chemical | Part | Low PPM | High PPM | StdDev | *Reference |
|---|-------|---|-------------|--------|--|
| | All | | | | |
| COUMARIC-ACID | Plant | -- | -- | | List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979. |
| COUMARIC-ACID-BETA-GLUCOSIDE | Plant | -- | -- | | List, P.H. and Horhammer, L., Hager's Handbuch der Pharmazeutischen Praxis, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979. |
| COUMARIN | Plant | -- | 2000.0 | -0.2 | * |
| Activities (57) | | | | | |
| Aldose-Reductase-Inhibitor 10 ug/ml cow (weak activity, 11% inhibition) | | Okada,Y,et al.1995.Search for Naturally Occurring Substances to Prevent the Complications of Diabetes.II.Inhibitory Effect of Coumarin and Flavonoid Derivatives on Bovine Lens Aldose Reductase and Rabbit Platelet Aggregation.Chem Pharm Bull43(8):1385-1387 | | | |
| Allelochemic IC100=2 mM | | Lydon, J. & Duke, S., The potential of pesticides from plants, pp. 1-41 in Craker, L. & Simon, J., eds. Herbs, Spices & Medicinal Plants: Recent Advances in Botany, Horticulture, & Pharmacology, v. 4, Oryx Press, Phoenix, 1989, 267pp. | | | |
| Analgesic | | Zebowitz, T. C. Ed. 1989. Part VII. Flavor and Fragrance Substances, in Keith L. H. and Walters, D.B., eds. Compendium of Safety Data Sheets for Research and Industrial Chemicals. VCH Publishers, New York. 3560-4253. | | | |
| Anesthetic | | | | | |
| Antiaggregant | | | | | |
| Antiandrogenic | | Planta Medica, 56(6): 671, 1990. | | | |
| Antibrucellosic | | Gawron, A., Gorski*, G., Glowniak**, K. 1989. Increased proliferation of phytohaemagglutinin (PHA)-stimulated human leucocytes after 8-methoxysoralen treatment. J. Pharm. Pharmacol. 42: 194-195, 1990. | | | |
| Anticancer (Kidney) 400-7,000 mg/day | | Mills, Simon and Bone, Kerry. 2000. Phytotherapy. Churchill Livingston, Edinburgh. | | | |
| Anticancer (Prostate) 400-7,000 mg/day | | Mills, Simon and Bone, Kerry. 2000. Phytotherapy. Churchill Livingston, Edinburgh. | | | |
| Antidiuretic | | | | | |
| Antiedemic | | Shimizu,*M., et al. 1990. Anti-inflammatory Constituents of Topically Applied Crude Drugs. IV.1) Constituents and Anti-inflammatory Effect of Paraguayan Crude Drug 'Alhucema' (Lavandula latifolia Vill.)2). Chem. Pharm. Bull. 38(8): 2283-2284, 1990. | | | |
| Antiesherichic | | Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp. | | | |
| Antiinflammatory | | Shimizu,*M., et al. 1990. Anti-inflammatory Constituents of Topically Applied Crude Drugs. IV.1) Constituents and Anti-inflammatory Effect of Paraguayan Crude Drug 'Alhucema' (Lavandula latifolia Vill.)2). Chem. Pharm. Bull. 38(8): 2283-2284, 1990. | | | |
| Antilymphedemic | | Mills, Simon and Bone, Kerry. 2000. Phytotherapy. Churchill Livingston, Edinburgh. | | | |
| Antimelanomic 50 mg/day | | | | | |
| Antimetastatic 50 mg/man/day | | Mills, Simon and Bone, Kerry. 2000. Phytotherapy. Churchill Livingston, Edinburgh. | | | |
| Antimitotic | | Pandeya, S.N. 1970. Biological Activity of Adamantyl Derivatives. The Indian Journal of Pharmacy, 33: 7. | | | |
| Antimononucleotic | | Mills, Simon and Bone, Kerry. 2000. Phytotherapy. Churchill Livingston, Edinburgh. | | | |
| Antimutagenic | | Economic & Medicinal Plant Research, 6: 235. | | | |
| Antimycoplasmotic | | Mills, Simon and Bone, Kerry. 2000. Phytotherapy. Churchill Livingston, Edinburgh. | | | |
| Antipsittacotic | | Mills, Simon and Bone, Kerry. 2000. Phytotherapy. Churchill Livingston, Edinburgh. | | | |
| Antipsoriac | | Pandeya, S.N. 1970. Biological Activity of Adamantyl Derivatives. The Indian Journal of Pharmacy, 33: 7. | | | |
| Antitoxoplasmotic | | Mills, Simon and Bone, Kerry. 2000. Phytotherapy. Churchill Livingston, Edinburgh. | | | |
| Antitumor 50 mg/day | | | | | |
| Antitumor (GI) | | | | | |
| Antitumor (Kidney) 400-7,000 mg/day | | Mills, Simon and Bone, Kerry. 2000. Phytotherapy. Churchill Livingston, Edinburgh. | | | |
| Antitumor (Prostate) 400-7,000 mg/day | | Mills, Simon and Bone, Kerry. 2000. Phytotherapy. Churchill Livingston, Edinburgh. | | | |
| Bacteristat | | Jeffery B. Harborne and H. Baxter, eds. 1983. Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants. Taylor & Frost, London. 791 pp. | | | |
| Bruchiphobe | | | | | |
| Cancer-Preventive 5-25 ug/ml | | Gawron, A. and Glowniak, K. 1987. Cytostatic Activity of Coumarins in vitro. Planta Medica 1987: 526. | | | |
| Carcinogenic 200 mg/kg orl mus | | Mills, Simon and Bone, Kerry. 2000. Phytotherapy. Churchill Livingston, Edinburgh. | | | |
| Cardiodepressant | | | | | |
| Cardiotonic | | | | | |
| Chemopreventive | | | | | |

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| DME-Inhibitor IC50=57.5 uM | Advance in Chinese Medicinal Materials Research. 1985. Eds. H. M. Chang, H. W. Yeung, W. -W. Tso and A. Koo. World Scientific Publishing Co., Philadelphia Pa., page 134. |
| Emetic | |
| Estrogenic | Newall, C. A., Anderson, L. A. and Phillipson, J. D. 1996. <i>Herbal Medicine - A Guide for Health-care Professionals</i> . The Pharmaceutical Press, London. 296pp. |
| Fungicide | Jeffery B. Harborne and H. Baxter, eds. 1983. <i>Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants</i> . Taylor & Frost, London. 791 pp. |
| Hemorrhagic | Jeffery B. Harborne and H. Baxter, eds. 1983. <i>Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants</i> . Taylor & Frost, London. 791 pp. |
| Hepatotoxic 0.8-1.71 mM/kg orl rat | |
| Hepatotoxic 2,500 ppm diet | |
| Hepatotoxic 100 mg/kg dog | |
| Hypnotic | Schultes, R.E. <i>De Plantis Toxicariis e Mundo Novo Tropicale Commentationes XXXVI. Justicia (Acanthaceae) as a Source of an Hallucinogenic Snuff</i> . Economic Botany 44(1): 61-70, 1990. |
| Hypoglycemic 250-1,000 mg/kg orl | Economic & Medicinal Plant Research, 6: 165 |
| Immunostimulant | |
| Juvabional | Jacobson, M., <i>Glossary of Plant-Derived Insect Deterrents</i> , CRC Press, Inc., Boca Raton, FL, 213 p, 1990. |
| Larvistat | Jeffery B. Harborne and H. Baxter, eds. 1983. <i>Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants</i> . Taylor & Frost, London. 791 pp. |
| Lymphocytogenic 100 mg/day | Gawron, A., Gorski*, G., Glowniak**, K. 1989. Increased proliferation of phytohaemagglutinin (PHA)-stimulated human leucocytes after 8-methoxysoralen treatment. <i>J. Pharm. Pharmacol.</i> 42: 194-195, 1990. |
| Lymphokinetic | |
| Narcotic | |
| Ovicide | |
| Pesticide | |
| Phagocytotic | Planta Medica, 56(6): 671, 1990. |
| Piscicide | Jeffery B. Harborne and H. Baxter, eds. 1983. <i>Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants</i> . Taylor & Frost, London. 791 pp. |
| Respirodepressant | |
| Rodenticide | Jeffery B. Harborne and H. Baxter, eds. 1983. <i>Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants</i> . Taylor & Frost, London. 791 pp. |
| Sedative | Schultes, R.E. <i>De Plantis Toxicariis e Mundo Novo Tropicale Commentationes XXXVI. Justicia (Acanthaceae) as a Source of an Hallucinogenic Snuff</i> . Economic Botany 44(1): 61-70, 1990. |

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|--------------|-------|----|----|--|
| FERULIC-ACID | Plant | -- | -- | List, P.H. and Horhammer, L., <i>Hager's Handbuch der Pharmazeutischen Praxis</i> , Vols. 2-6, Springer-Verlag, Berlin, 1969-1979. |
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Activities (61)

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| Allelopathic | Holappa, L.D., and Blum*, U. 1991. Effects of Exogenously Applied Ferulic Acid, a Potential Allelopathic Compound, on Leaf Growth, Water Utilization, and Endogenous Abscisic Acid Levels of Tomato, Cucumber, and Bean. <i>J. of Chemical Ecology</i> , 17(5): 865. |
| Analgesic | Advance in Chinese Medicinal Materials Research. 1985. Eds. H. M. Chang, H. W. Yeung, W. -W. Tso and A. Koo. World Scientific Publishing Co., Philadelphia Pa., page 69. |
| Antiaggregant | Ozaki, Y. and Ma, J-P. 1989. Inhibitory Effects of Tetramethylpyrazine and Ferulic Acid on Spontaneous Movement of Rat Uterus in Situ. <i>Chem. Pharm. Bull.</i> 38(6): 1620-1623, 1990. |
| Antiallergic | Leung, A. Y. and Foster, S. 1995. <i>Encyclopedia of Common Natural Ingredients</i> 2nd Ed. John Wiley & Sons, New York. 649 pp. |
| Antiarrhythmic | |
| Antibacterial | Jeffery B. Harborne and H. Baxter, eds. 1983. <i>Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants</i> . Taylor & Frost, London. 791 pp. |
| Anticancer (Colon) | |
| Anticancer (Forestomach) | |
| Anticancer (Liver) | |
| Anticancer (Skin) | |
| Anticarcinogenic | |
| Antidysmenorrheic | |
| Antiestrogenic | Jeffery B. Harborne and H. Baxter, eds. 1983. <i>Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants</i> . Taylor & Frost, London. 791 pp. |
| Antihepatotoxic | Jeffery B. Harborne and H. Baxter, eds. 1983. <i>Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants</i> . Taylor & Frost, London. 791 pp. |
| Antiherpetic | |
| Antiinflammatory | Hagerman, A.E. <i>Tannin-Protein Interactions. Phenolic Compounds in Food and Their Effects on Health</i> , Ch.19. |
| Antileukemic IC50=25-56 ug/ml | Chiang, L. C., Chiang, W., Chang, M. Y., Ng, L. T., Lin, C. C. 2003. Antileukemic activity of selected natural products in Taiwan. <i>Am J Chin Med</i> , 31(1):37-46. |
| Antimitotic | Jeffery B. Harborne and H. Baxter, eds. 1983. <i>Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants</i> . Taylor & Frost, London. 791 pp. |
| Antimutagenic | Ki Soon Rhee. <i>Oilseed Food Ingredients Used To Minimize Oxidative Flavor Deterioration in Meat Products. Phenolic Compounds in Food and Their Effects on Health</i> , Ch.18. |
| Antineoplastic (Stomach) | |
| Antinitrosaminic | Ki Soon Rhee. <i>Oilseed Food Ingredients Used To Minimize Oxidative Flavor Deterioration in Meat Products. Phenolic Compounds in Food and Their Effects on Health</i> , Ch.18. |
| Antioxidant 3,000 uM | |
| Antioxidant IC51=200 ppm | |
| Antioxidant 1/3 quercetin | |
| Antioxidant 1/2 BHA | |
| Antioxidant EC50=9-15 ug/ml | |

Antiradicular IC50=116-
124 uM

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| Antiserotonin | Jeffery B. Harborne and H. Baxter, eds. 1983. <i>Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants.</i> Taylor & Frost, London. 791 pp. |
| Antispasmodic | Leung, A. Y. and Foster, S. 1995. <i>Encyclopedia of Common Natural Ingredients 2nd Ed.</i> John Wiley & Sons, New York. 649 pp. |
| Antithrombic | Leung, A. Y. and Foster, S. 1995. <i>Encyclopedia of Common Natural Ingredients 2nd Ed.</i> John Wiley & Sons, New York. 649 pp. |
| Antitumor | Jeffery B. Harborne and H. Baxter, eds. 1983. <i>Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants.</i> Taylor & Frost, London. 791 pp. |
| Antitumor (Colon) | |
| Antitumor (Forestomach) | |
| Antitumor (Liver) | |
| Antitumor (Skin) | |
| Antitumor-Promoter IC46=10 uM | Cancer Research, 48: 5941. |
| Antiviral | Vlietinck, A.J. and Dommisse, R.A. eds. 1985. <i>Advances in Medicinal Plant Research.</i> Wiss. Verlag. Stuttgart. |
| Arteriodilator | Ozaki, Y. and Ma, J-P. 1989. Inhibitory Effects of Tetramethylpyrazine and Ferulic Acid on Spontaneous Movement of Rat Uterus in Situ. Chem. Pharm. Bull. 38(6): 1620-1623, 1990. |
| Cancer-Preventive | Stitt, P. A. Why George Should Eat Broccoli. Dougherty Co, Milwaukee, WI, 1990, 399 pp. |
| Candidicide | Jeffery B. Harborne and H. Baxter, eds. 1983. <i>Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants.</i> Taylor & Frost, London. 791 pp. |
| Cardiac | Ozaki, Y. and Ma, J-P. 1989. Inhibitory Effects of Tetramethylpyrazine and Ferulic Acid on Spontaneous Movement of Rat Uterus in Situ. Chem. Pharm. Bull. 38(6): 1620-1623, 1990. |
| Cholagogue | Pharmazie, 46: 156, 1991. |
| Choleretic | Williamson, E. M. and Evans, F. J., <i>Potter's New Cyclopaedia of Botanical Drugs and Preparations</i> , Revised Ed., Saffron Walden, the C. W. Daniel Co., Ltd., Essex UK, 362 pp, 1988, reprint 1989. |
| Fungicide | Nigg, H.N. and Seigler, D.S., eds. 1992. <i>Phytochemical Resources for Medicine and Agriculture.</i> Plenum Press, New York. 445 pp. |
| Hepatoprotective | Mills, Simon and Bone, Kerry. 2000. <i>Phytotherapy.</i> Churchill Livingston, Edinburgh. |
| Hepatotropic | |
| Herbicide | Angewandte Botanik 68(5/6)=1994. Page 195. |
| Hydrocholerectic | Jeffery B. Harborne and H. Baxter, eds. 1983. <i>Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants.</i> Taylor & Frost, London. 791 pp. |
| Hypolipidemic | |
| Immunostimulant | Economic & Medicinal Plant Research, 1: 124. |
| Insectifuge | Tunon, H., Thorsell, W., and Bohlin, L. 1993. Mosquito Repelling Activity of Compounds Occurring in Achillea millefolium L. (Asteraceae). Economic Botany 48(2): 111-120, 1994. |
| Metal-Chelator | McEvily, A.J., Iyengar, R., and Gross, A.T. Inhibition of Polyphenol Oxidase by Phenolic Compounds. <i>Phenolic Compounds in Food and Their Effects on Health</i> , Ch.25. |
| Ornithine-Decarboxylase-Inhibitor | Hagerman, A.E. Tannin-Protein Interactions. <i>Phenolic Compounds in Food and Their Effects on Health</i> , Ch.19. |
| Pesticide | |
| Phagocytotic | |
| Preservative | Merck 11th Edition |
| Prostaglandigenic | |
| Prostaglandin-Synthesis-Inhibitor 0.58-3.2 mM | Xu, L. N., Yu, W. G., Tian, J. Y., Liu, Q. Y. 1990. Effect of Sodium Ferulate on Arachidonic Acid Metabolism. Yao Hsueh Hsueh Pao, 25(6): 412-416. |
| Sunscreen | Chemical Marketing Reporter; a weekly tabloid, 9/10/92. |
| Uterosedative 30-100 mg/kg ivn rat | Ozaki, Y. and Ma, J-P. 1989. Inhibitory Effects of Tetramethylpyrazine and Ferulic Acid on Spontaneous Movement of Rat Uterus in Situ. Chem. Pharm. Bull. 38(6): 1620-1623, 1990. |

MELIOTIC-ACID

Plant -- -- List, P.H. and Horhammer, L., *Hager's Handbuch der Pharmazeutischen Praxis*, Vols. 2-6, Springer-Verlag, Berlin, 1969-1979.

Activities (1)

Antiulcerogenic Jeffery B. Harborne and H. Baxter, eds. 1983. *Phytochemical Dictionary. A Handbook of Bioactive Compounds from Plants.* Taylor & Frost, London. 791 pp.